



Federal wounded at Marye's Heights, near Fredericksburg, Va.

# MEDICINE of the CIVIL WAR

an exhibit at the



8600 Rockville Pike  
Bethesda, Maryland 20014

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JUNE 11 - SEPT. 28, 1973

The National Library of Medicine is indebted to Paul E. Steiner, M.D., Ph.D., professor emeritus of Pathology, School of Medicine, University of Pennsylvania, for his consultation and support in the preparation of this exhibit.

The Library also extends thanks to the following organizations for their contributions:

Library of Congress  
Smithsonian Institution (Division of Medical Sciences)  
Gettysburg National Park (Department of Interior)  
Museum of the Armed Forces Institute of Pathology  
The Valentine Museum, Richmond, Virginia  
The New York Public Library  
The Medical Society of Virginia

# MEDICINE of the CIVIL WAR

Casualties during the Civil War are often evaluated in terms of trauma and death resulting from battle-field wounds and accidents. In truth, the major killer of the War between the States was sudden and uncontrollable disease.

Statistics of morbidity and mortality related to casualties of the Confederate Armies are relatively scarce. Many records of the Medical Corps of the Confederacy were destroyed in the Richmond fire. Among the Northern troops, deaths from disease, both infectious and noninfectious, were about double those resulting from wounds. From the available data, it may be assumed that statistics for

the Confederacy were comparable.

Attrition from infectious diseases decimated troops, delayed some campaigns, and indeed, prevented others from even starting. In almost every unit of both the Union and Confederate Armies, there were, eventually, cases of dysentery, malaria, measles, typhoid fever, smallpox, tuberculosis, and other diseases.

This exhibit is displayed in tribute to the dedicated medical personnel of both sides, who worked unceasingly and heroically to alleviate the suffering of the sick and wounded.



Wounded Soldiers after the Battle of the Wilderness – 1864  
(Brady Collection)

## CARE OF THE WOUNDED

During the first actions of the war, some wounded men were inadvertently left on the battlefield for as long as two days before being moved for treatment. The injured were first transported by untrained litter bearers, who used discarded gates, doors, window frames, ladders, and other objects as improvised litters. The walking wounded often carried the disabled to the rear.

In the fierce fighting of the battle of Gettysburg — probably the bloodiest of the war — such was the efficiency of administration that, after each day, not one of the fallen was left on the ground. This rapidity of action was in sharp contrast to the tardy removal of casualties during earlier battles. The ambulance trains moved the casualties to field installations, and after treatment they were taken as soon as possible to general hospitals.

At Gettysburg, almost every division had its own hospital, grouped according to Army Corps. These hospitals were strategically located near creeks to provide badly needed water.

The enormity of the task which confronted the field surgeon is sharply delineated in this passage from a report of Surgeon John H. Brinton on April 6, 1862, written during the battle of Shiloh:

“The mass of wounded in Sunday’s fight, who received the attentions of the surgeon had dragged themselves, as best they might, to the high bluffs between the middle and hospital landings . . . . A limited amount of hay had been obtained from the transports and this, littered on the earth, served as a bed for those most grievously hurt . . . . The weather was terrible, the rain incessant, and the mud almost knee deep. The medical officers of the command labored faithfully and all that was possible was done to alleviate the horrors of that fearful night . . . .”

## SURGERY IN THE FIELD

The wounded soldier who received medical attention in the field (and base hospital) had still to run the considerable risk of surgery. After ambulance facilities were available, field hospitals were sometimes overwhelmed by major battle casualties. The limited number of surgeons worked around the clock and haste and neglect were unavoidable under such circumstances. (See the letter of Dr. J. S. Billings written to his wife from a field hospital at Gettysburg in this exhibit.)



Wounded during the action at Spotsylvania  
(Brady Collection)

Anesthetics, generally chloroform, were available, but there was no notion of aseptic procedure. As W. W. Keen recalled some years later:

“We operated in old blood-stained and often pus-stained coats . . . with undisinfected hands . . . We used undisinfected instruments . . . and marine sponges which had been used in prior pus cases and only washed in tap water.”

Nearly all wounds became infected. In the case of chest or abdominal wounds, surgeons probed with their fingers, prescribed morphine and tried to stop external bleeding. Otherwise there was little that could be done. Death within three days from hemorrhage and/or infection was the normal result. The average Union mortality from gunshot wounds of the chest was 62 percent of cases and from wounds of the abdomen, no less than 87 percent. By way of contrast, only about 3 percent of all American wounded failed to survive in World War II.

The chances for survival following an injury to the extremities were better though not good. Joints were resected and limbs amputated with alarming frequency, often in an attempt to prevent the spread of infection. It was usually the ensuing infection which caused death. The so-called “surgical fevers” included tetanus, erysipelas, hospital-gangrene, and septicemia.

## MEDICAMENTS

Medical supplies were transported to the battle areas as part of the general field train, and carried

to the front lines in ambulances, or on pack mules, or on the shoulders of the regimental hospital stewards.

The major effective drugs in use were quinine and morphia. Whiskey was frequently administered to the wounded to induce "reaction," and as the solvent for quinine sometimes administered daily as a suppressant of malaria.

Chloroform, sometimes mixed with small amounts of ether, served as an anesthetic. Among other drugs used were opium, pepsin, various emetics and cathartics, iodine, and calomel.

Dysentery, one of the most important diseases from the viewpoint of both high morbidity and mortality, was treated with oil of turpentine, among many other substances, and ipecac was administered for enteritis; probably neither of these was very effective.

The paratyphoid fevers were not separately recognized and diagnosed; the term "typhomalarial fever" was used to describe debatable cases of prevalent remittent fever.

The lack of preventive measures and specific therapy for treatment of the various diseases became a major factor in the outcome of some battles, and

at times, of entire campaigns.

## AMBULANCE CORPS

The original organization of the medical service offered inadequate provision for the removal of the great numbers of casualties from collecting points to hospitals in rear echelon areas. On September 7, 1862, in a letter to Secretary of War Stanton, Surgeon General William A. Hammond requested the formation of an ambulance corps. The corps, complete with animals, personnel, and supplies, was first established under the guidance of Dr. Jonathan Letterman, Medical Director of the Army of the Potomac.

On the Confederate side, the task of transporting the wounded was complicated by the difficulty of running supplies and equipment through the Northern blockade of Southern Atlantic ports and the lower Mississippi River.

As in the North, the duties of Confederate surgeons included supervising the moving of the wounded from the battle lines to facilities in the rear. Toward the end of the war, the entire transportation system of the Confederacy, including their ambulance organization, collapsed for want of the necessary equipment and supplies.



Ambulance train near Harewood Hospital, Washington, D.C. 1863 (Brady Collection)



Top: Ward in a hospital at a convalescent camp near Alexandria, Va. (Brady Collection)

Bottom: United States Sanitary Commission Camp (Brady Collection)



## HOSPITALS

The hospitals of the Civil War varied from crude, quickly constructed regimental receiving stations near the battle lines to well-staffed and fully equipped general hospitals at the rear capable of handling thousands of casualties.

At the outset of the war, a mere handful of surgeons and administrators was available for the immense task of organizing, staffing, and supplying the vast medical complexes required by both sides. Public schools, abandoned buildings, factories, warehouses, churches, and private homes were all utilized as medical care facilities.

In the South, the Chimborazo Hospital in Richmond was the largest military hospital of its time. Dr. James B. McCaw was appointed medical director of this enormous complex, completed in early 1862. It had a capacity of 6,000 beds, and treated 76,000 patients.

The Northern States, with their more numerous facilities, had Carver, Stanton, and Campbell Hospitals, located in or near Washington. Dozens of others were scattered throughout the Union States, convenient to transportation facilities by rail or water. In the summer of 1864, a period of high casualties, hospitals as far from the eastern front as New York and Boston, and as far west as Louisville, St. Louis, and Cincinnati received the sick and wounded.

## THE ROLE OF WOMEN

At the outbreak of hostilities, it became evident that corollary assistance would be needed to support the troops. In the North, the United States Sanitary Commission, a civilian organization, evolved from this need. Originally organized by women in most of the large cities in 1861, the general intent of the Commission was to assist the government in the care of the troops. The Commission provided temporary shelters, clean bedding, wholesome food, and other services for the men.

In the South, there were many women's aid societies, but none approached the scope of operation of the Sanitary Commission. The principal activities of these groups in the Confederacy paralleled those of the Commission; in addition, they helped run medical supplies through the Northern blockade, and took the ailing into their homes. In general, however, the South lacked the resources and organization to match the efforts of the Northern groups.



Clara Barton — a war-time photograph (Brady Collection)

Among the many dedicated women on both sides engaged in this type of service were Clara Barton, founder of the National Red Cross, and Louisa May Alcott, the famous author, who served as a nurse. Sally Louise Tompkins of the South maintained the Robertson Hospital in Richmond, Va. and was commissioned a captain in the Confederate States Army.



Sally Louise Tompkins, the only woman ever commissioned by the Confederacy. (Courtesy Valentine Museum)

## PRISONERS OF WAR

More than 600,000 men of both sides were ultimately incarcerated as prisoners of war. Neither Union nor Confederate authorities were prepared to receive the numbers eventually confined.

Many prisons were established in warehouses and other existing buildings. A Southern prison at Richmond had been a factory; Libby Prison in the same city, a tobacco warehouse. The North used such structures as an abandoned penitentiary at Alton, Illinois, for prisoners in the west, and Fort Columbus in New York was converted into a prison facility.

By 1863, the numbers captured had created an appalling situation — this, despite the fact that the opposing sides had entered into an agreement (July 22, 1862) to exchange prisoners. Suffering in the prisons was increased because of insufficient and improper food and the lack of adequate medical facilities. Some prisons maintained hospitals, but they were poorly staffed and meagerly supplied.

The logistics demands of the line organizations and the general shortages which lasted throughout the war years, coupled with overcrowding, added to the harshness of prison life.



Camp Douglas, located near Chicago. During the month of February, 1863, almost 10% of the prison population died.

The overcrowding contributed to the spread of diseases. At one point, the prison population at Andersonville, Georgia reached 33,000. As with many prisons of the Civil War, little effort was made to cleanse living quarters, and sanitary and bathing facilities were virtually nonexistent.

This lack of sanitation, in part caused by open sewers and latrines, gave rise to thousands of cases of disease and increased mortality. Malnutrition, diarrhea, dysentery, and respiratory diseases were common.

In 1908, the Adjutant General of the United States published the following memorandum:

“According to the best information now obtainable from both Union and Confederate records, it appears that 211,411 Union soldiers were captured during the Civil War . . . and 30,218 died while in captivity and that 462,634 Confederate soldiers were captured during that war . . . and 25,976 died while in captivity.”

That is, 6 percent of captured Confederate soldiers and 14 percent of all Union prisoners of war died in captivity.



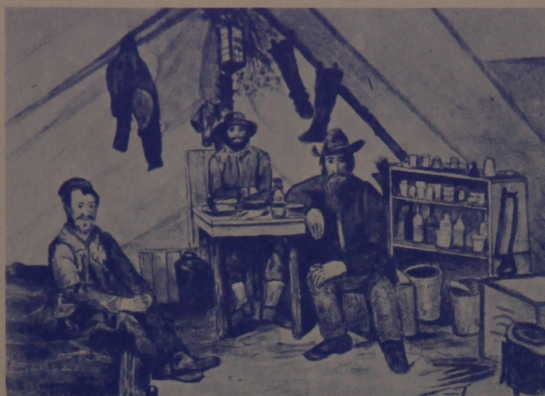
Forest Hall Military Prison, Georgetown, Washington, D.C.



Top: Part of the prison population at Andersonville, Georgia. (Brady Collection)

Below: Scene at Andersonville, where many inmates died as a result of various diseases. (Photo by A. J. Riddle)





Hospital Tent, Jan. 1863  
(by Wm. McIlvaine Jr.)



Wounded being carried from burning woods, Battle of the Wilderness, May 1864. (by Alfred R. Waud)

### SPECIAL ARTISTS

Several illustrated publications assigned artists to cover the Civil War. The immediacy of the sketches rendered by these men in the field caught the drama and tragedy of the conflict.

Among the most prolific of the illustrators, or "special artists," as they were called, was Alfred

Waud, who represented *Harper's Weekly*. Winslow Homer, one of America's most famous artists, was also among those sketching in the field.

The Civil War was the first to have comprehensive pictorial coverage, at least for the North, both in photographs and drawings. Only Northern illustrated publications had artists with the troops, since all of the illustrated papers of that time were published in New York City.



The Walking Wounded, by Winslow Homer  
(Ca. 1863)

#### REFERENCES:

- Medical and Surgical History of the War of the Rebellion (1870-1888)*  
Miller, *Photo History of the Civil War* - 1911  
National Gallery of Art, *The Civil War* - 1961  
Eaton, *Original Photographs of the Civil War* - 1907  
Steiner, *Disease in the Civil War* - 1968  
Cunningham, *Doctors in Gray* - 1958  
Adams, *Doctors in Blue* - 1952  
Steiner, *Medical-Military Portraits* - 1968  
Confederate States Army, *Manual of Military Surgery* - 1863  
Medical Society of Virginia, *Confederate Medicine* - 1961  
Steiner, *Physicians General in the Civil War* - 1966

**U.S. Department of Health, Education, and Welfare**  
Public Health Service  
National Institutes of Health

**DHEW Publication No. (NIH) 74- 531**